



**Detailed Schedule**  
**October 19-21, 2017**

**Thursday, October 19<sup>th</sup>**

- 4:00 pm Check-in at hotel, Calvary Court, 200 Century Ct., College Station, TX 77840  
Phone: (979)485-5586
- 4:00-7:30 pm Registration opens at the Thomas G. Hildebrand '56 Equine Center  
*Location: Bartlett Recognition Hall*
- 4:00-5:00 pm Business meeting (Executive committee only)  
*Location: Conference Room in Bartlett Recognition Hall*
- 5:00-6:30 pm Dinner (on your own)
- 6:30-7:30 pm Social Mixer (dessert bar and drinks provided)  
*Location: Bartlett Recognition Hall/Auditorium*
- 7:30 pm **Welcome** – Dr. Jenny Hyde, Texas A&M College of Medicine
- 7:30-8:30 pm **Keynote Address:**  
*Location: Auditorium*

**Dr. Stefano Bertuzzi, Ph.D., M.P.H.**  
Chief Executive Officer  
American Society for Microbiology (ASM)  
Email: [sbertuzzi@asmusa.org](mailto:sbertuzzi@asmusa.org)

**Friday, October 20<sup>th</sup>**

- 7:15-8:30 am Registration open  
*Location: Bartlett Recognition Hall*
- 7:30-8:30 am Poster Session Set-Up  
*Location: Auditorium/Bartlett Recognition Hallway*
- 7:30-8:30 am **Coffee & Light Breakfast provided**  
*Location: Auditorium*
- 8:30-10:30 am Concurrent Sessions  
*Location: Andras Classrooms & Auditorium*

**Session A: Plant and Environmental Microbiology – Andras Classrooms**  
**Session Chair: Dr. Martin B. Dickman**  
**Email: [mbdickman@tamu.edu](mailto:mbdickman@tamu.edu)**  
**Institution: Texas A&M AgriLife Research**

- 8:30 am Abstract Title: Seasonal differences in microbial succession during decomposition in southeast Texas  
Presented By: Zechariah Carroll  
Institution: Sam Houston State University
- 8:45 am Abstract Title: Evaluating novel desiccation-tolerant *Bradyrhizobium* inoculants for symbiotic efficiency and soybean production  
Presented By: Dylan Parks  
Institution: University of Texas - Arlington
- 9:00 am Abstract Title: The efficiency of high concentration of ozone to disinfected alfalfa seeds and sprouts from *Shiga-Toxin- Producing Escherichia coli* (STEC)  
Presented By: Zahra Mohammad  
Institution: Texas A&M University
- 9:15 am Abstract Title: Density-dependent colony expansion of socially motile *Myxococcus xanthus* cells is driven by exopolysaccharides  
Presented By: Kimberley Kissoon  
Institution: University of Houston-Downtown
- 9:30 am Abstract Title: Bioprospecting rhizobacteria to improve drought resistance in grasses  
Presented By: Michael Jochum  
Institution: Texas A&M University
- 9:45 am Abstract Title: Assessing ecological and health risks of pollutants in Trinity Bay and Galveston Bay after Hurricane Harvey  
Presented By: ChihHung Chen  
Institution: Texas A&M University
- 10:00 am Abstract Title: Cover crop impact on soil microbial activity and nitrogen cycling in rainfed cotton  
Presented By: Brian Hux  
Institution: Texas A&M University

**Session B: General Microbiology – Auditorium**  
**Session Chair: Dr. Zhilei Chen**  
**Email: [zchen@medicine.tamhsc.edu](mailto:zchen@medicine.tamhsc.edu)**  
**Institution: Texas A&M Health Science Center**

- 8:30 am Abstract Title: Structural insights into species-specific features of the ribosome from human pathogen *Mycobacterium tuberculosis*  
Presented By: Kailu Yang  
Institution: Texas A&M University
- 8:45 am Abstract Title: Blood from trauma patients produces major shifts in *Pseudomonas aeruginosa* transcriptome  
Presented By: Moamen Elmassry  
Institution: Texas Tech University
- 9:00 am Abstract Title: Conservation of a novel germination pathway in *Paraclostridium bifermentans*  
Presented By: Disha Bhattacharjee  
Institution: Texas A&M University

- 9:15 am Abstract Title: Determining the role of the spoVAD and spoVAE genes in DPA release during *Clostridium difficile* spore germination  
Presented By: Marko Baloh  
Institution: Texas A&M University
- 9:30 am Abstract Title: Intracellular competition and cooperation mediate viral decision-making  
Presented By: Jimmy Trinh  
Institution: Texas A&M University
- 9:45 am Abstract Title: Effect of DNA replication on bacteriophage lambda decision-making  
Presented By: Qiuyan Shao  
Institution: Texas A&M University
- 10:00 am Abstract Title: Using CRISPR-Cas9-mediated genome editing to generate *Clostridium difficile* mutants defective in selenoprotein synthesis  
Presented By: Kathleen McAllister  
Institution: Texas A&M University
- 10:15 am Abstract Title: The type IV secretion effector CBU1217 alters the host innate response to *Coxiella burnetii*  
Presented By: Elizabeth Case  
Institution: Texas A&M Health Science Center

10:30-10:45 am **Break**

10:45-11:30 am **Keynote Address:**  
*Location: Auditorium*

**Dr. Karl Klose, Ph.D.**

University of Texas at San Antonio

ASM Distinguished Lecturer and Robert J. Kleberg Jr. and

Helen C. Kleberg, College of Sciences Professor

Email: [karl.klose@utsa.edu](mailto:karl.klose@utsa.edu)

11:30 am-2:00 pm **Lunch and Poster Session (Boxed Lunch provided in Pavilion)**  
(All posters manned by presenters between 12:00 – 2:00 pm)  
*Poster Location: Auditorium/ Bartlett Recognition Hall*

**\*Vendor tables available in Bartlett Recognition Hall\***

2:00-3:00 pm Career Panel  
*Location: Auditorium*

3:00-3:15 pm **Coffee Break**  
*Location: Auditorium*

3:15-4:30 pm Concurrent Sessions  
*Location: Andras Classrooms & Auditorium*

**Session C: Vector Borne Disease – Andras Classrooms**

**Session Chair: Dr. Jere McBride**

**Email: [jemcbrid@utmb.edu](mailto:jemcbrid@utmb.edu)**

**Institution: The University of Texas Medical Branch**

- 3:15 pm Abstract Title: The loss of vector competency and transmission of the relapsing fever spirochete, *Borrelia turicatae*, in association with in vitro cultivation  
Presented By: Aparna Krishnavajhala  
Institution: Baylor College of Medicine
- 3:30pm Abstract Title: Arthropod-borne emerging infectious diseases in Texas skunks: implications for public health and conservation medicine  
Presented By: Bonnie E Gulas Wroblewski  
Institution: Texas A&M College of Veterinary Medicine and Biomedical Sciences
- 3:45 pm Abstract Title: The vls system of *Borrelia burgdorferi* does not allow Lyme disease spirochetes to persistently evade the rabbit antibody response.  
Presented By: Maliha Batool  
Institution: Texas A&M University
- 4:00 pm Abstract Title: Evaluation of immunogenicity and protective efficacy of a *Borrelia burgdorferi* BB0172- derived conjugated peptide in mice against Lyme disease  
Presented By: Wisam Hassan  
Institution: Texas A&M University

**Session D: Undergraduate Student Presentations – Auditorium**

**Session Chair: Ana Cabello**

**Email: [acabello@cvm.tamu.edu](mailto:acabello@cvm.tamu.edu)**

**Institution: Texas A&M University**

- 3:15 pm Abstract Title: Antimicrobial activity of silver ibuprofen against multi-drug resistant (MDR) Gram-positive and Gram-negative pathogens  
Presented by: Sabona B. Simbassa  
Institution: Texas A&M University
- 3:30 pm Abstract Title: Resistance to  $\Phi$ NPV1 is accompanied by daptomycin sensitivity and susceptibility to osmotic stress in *Enterococcus faecalis*  
Presented By: Khang Ho  
Institution: The University of Texas at Dallas
- 3:45 pm Abstract Title: Developing a combination of antifungal treatments against *Mucormycosis*  
Presented By: Alejandra Lorenzen  
Institution: University of Texas at San Antonio
- 4:00 pm Abstract Title: Diversity of bacteria in the readily culturable microbiome of university students  
Presented By: David Carr  
Institution: University of Houston Clear Lake
- 4:15 pm Abstract Title: Circadian orchestration of symbiotic nitrogen fixation in photosynthetic *Rhizobia* associated with *Aeschynomene* legumes  
Presented by: Christian Peterson  
Institution: University of Texas Arlington

4:30-4:45 pm **Break**

4:45-5:30 pm Award Ceremony for Oral and Poster Presentations  
*Location: Auditorium*

5:30-6:00 pm **Clinical Microbiology Keynote Address:**  
*Location: Auditorium*

**Dr. Carrie L. Byington, M.D.**  
The Jean and Thomas McMullin Professor and Dean of Medicine  
Senior Vice President, Health Science Center  
Vice Chancellor for Health Services  
Texas A&M University  
Email: [mayland@tamhsc.edu](mailto:mayland@tamhsc.edu)

6:00-7:30 pm **Dinner provided. Cash bar available.**  
*Location: Pavilion*

7:30 pm Dance performance provided by the Aggie Wranglers  
*Location: Pavilion*

8:00-10:00 pm Music provided by If Birds Could Fly  
*Location: Pavilion*

### **Saturday, October 21<sup>st</sup>**

7:30-11:00 am Registration open  
*Location: Bartlett Recognition Hall*

8:00-9:00 am **Coffee & Light Breakfast provided**  
*Location: Auditorium*

9:00-10:00 am Concurrent Sessions  
*Location: Andras Classroom A & B*

#### ***Session E: Microbial Pathogenesis and Immunology, Section A (Microbiology emphasis) – Andras Classrooms***

**Session Chair: Dr. Koichi Kobayashi**

**Email: [kobayashi@medicine.tamhsc.edu](mailto:kobayashi@medicine.tamhsc.edu)**

**Institution: Texas A&M Health Science Center**

9:00 am Abstract Title: Kinetics of intratracheal aerosol inoculation in a guinea pig model for *Brucella melitensis* infection  
Presented By: Martha Hensel  
Institution: Texas A&M University

9:15 am Abstract Title: Imaging a guinea pig model of pneumonia utilizing bioluminescent *Pseudomonas aeruginosa* and *Klebsiella pneumoniae*  
Presented By: Dr. Riti Sharan  
Institution: Texas A&M Health Science Center

9:30 am Abstract Title: 3-sulfo-galactosyl dependent adhesion of *Escherichia coli* HS Multivalent Adhesion Molecule is attenuated by sulfatase activity  
Presented By: Diana Pereira Vaz  
Institution: University of Texas Health Science Center at Houston

9:45 am Abstract Title: Dissecting actinobacterial dormancy and resuscitation at the molecular level  
Presented By: Dr. Steven J Bark  
Institution: University of Houston

**Session F: Microbial Pathogenesis and Immunology, Section B  
(Microbiology emphasis) – Auditorium**

**Session Chair: Dr. David McMurray**

**Email: [mcmurray@medicine.tamhsc.edu](mailto:mcmurray@medicine.tamhsc.edu)**

**Institution: Texas A&M Health Science Center**

- 9:00 am Abstract Title: Safety, tolerability, and effects on alveolar macrophages of a nebulized TLR agonist combination in foals  
Presented By: Dr. Angela Bordin  
Institution: Texas A&M University
- 9:15 am Abstract Title: Pyoverdine kills mammalian cells through mitochondrial damage via iron removal  
Presented By: Dr. Natasha Kirienko  
Institution: Rice University
- 9:30 am Abstract Title: Characterization of guinea pig PML bodies and the role of guinea pig cytomegalovirus immediate-early proteins in PML disruption and virus pathogenicity  
Presented By: Dr. Yeon Choi  
Institution: Texas A&M Health Science Center
- 9:45 am Abstract Title: *Brucella* subverts host RIDD activity to promote intracellular parasitism  
Presented By: Kelsey M. Way  
Institution: Texas A&M Health Science Center

10:00-11:00 am Concurrent Sessions  
*Location: Andras Classroom A & B*

**Session G: Food Safety and Food Microbiology – Andras Classrooms**

**Session Chair: Suresh Pillai**

**Email: [spillai@tamu.edu](mailto:spillai@tamu.edu)**

**Institution: Texas A&M Agriculture & Life Sciences**

- 10:00 am Abstract Title: A metabolomic analysis of the response of *E. coli* O26 to electron beam irradiation  
Presented By: Sohini Bhatia  
Institution: Texas A&M University
- 10:15 am Abstract Title: Effects of intermittent feeding of tylosin phosphate during the finishing period on antimicrobial resistance of *Enterococcus spp.* in feedlot steers  
Presented By: Olanrewaju James Ogunrinu  
Institution: Texas A&M University
- 10:30 am Abstract Title: Effects of increasing concentrations of dietary zinc on levels of antimicrobial resistance among fecal *Escherichia coli* in feedlot cattle  
Presented By: Ethan A Taylor  
Institution: Texas A&M University
- 10:45 am Abstract Title: Towards more robust metagenome profiling  
Presented By: David Burk  
Institution: University of North Texas

**Session H: Microbiome – Auditorium**

**Session Chair: Arul Jayaraman**

**Email: [arulj@mail.che.tamu.edu](mailto:arulj@mail.che.tamu.edu)**

**Institution: Texas A&M University**

10:00 am Invited speaker: Dr. Robert Alaniz, Texas A&M Health Science Center  
Email: [alaniz@medicine.tamhsc.edu](mailto:alaniz@medicine.tamhsc.edu)

10:30 am Abstract Title: NFkB: Integrator of host-diet-microbiota interactions  
Presented By: Crissie Vandehoef  
Institution: Texas A&M Health Science Center

10:45 am Abstract Title: Human nasal microbiomes in a novel ex vivo mucosal model  
elucidate host-microbe and microbe-microbe interactions  
Presented By: Sarah Hoskinson  
Institution: University of Texas Medical Branch at Galveston

11:00 am Abstract Title: Dysbiosis of microbiota after ingestion of *Mucor circinelloides*  
isolated from a yogurt in a murine model  
Presented By: Katherine Mueller  
Institution: The University of Texas at San Antonio

11:15 am Conclusion of Meeting